FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST 6190

FACILITY NAME: Port of Port Angeles Wash-Down Facility, Multipurpose Work Pad, and Marine Terminal 1&3

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST 6190. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the Port Angeles POTW. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A – Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix D—Response to Comments.

GENERAL INFORMATION			
Applicant	Port of Port Angeles		
Facility Name and Address	Wash-down Facility and Multipurpose Work Pad Marine Terminal 1 and Marine Terminal 3		
Type of Facility:	Pressure wash pad and work station for large vessel repair and cleaning. Pre-treatment to POTW		
Facility Discharge Location	Latitude: 48° 07' 15" N Longitude: 122° 25' 44" W.		
Treatment Plant Receiving Discharge	Port Angeles POTW (local metal limits apply)		
Contact at Facility	Name: Susan Bauer (360) 417-3452 and Curtis Shuck (360) 417-3434		
Responsible Official	Name: Susan Bauer Title: Environmental and Planning Officer Address: P.O. Box 1350, Port Angeles 98362 Telephone #: (360)417-3452 FAX # (360) 452-3959		

BACKGROUND INFORMATION

HISTORY:

The issue of shipyard activity in Port Angeles has been long-standing. The process was finally begun with the issuance of an Order and Penalty to the Port of Port Angeles (Port) for having a tenant work on barges and a sea-going tug, all in excess of the 65 foot cutoff between boatyards and shipyards. The requirements of the Order included applying for and acquiring an individual National Pollutant Discharge Elimination System Shipyard Permit. The Port met the initial requirement and submitted an application on time per the conditions of the Order. Consultants were finally selected for project design.

In the course of several meetings, a concept design was generally agreed to that would incorporate 12 concrete work stations, and a pressure wash pad to do bottom cleaning prior to placing the vessel on the work pad. The contact storm water was to be pretreated and discharged to ground at a designed infiltration basin. The basin had to be located somewhere other than near the shipyard activity due to the confirmed presence of petroleum contaminated ground water from historical petroleum bulk storage operations in the vicinity. A site was selected to the west near the Diashowa Paper mill.

This proposed infiltration site quickly had to be abandoned as the Washington State Department of Transportation (WSDOT) decided to take the whole parcel and turn it into a large graving dock to build floating bridge pontoon sections and bridge anchors. About the same time, another industry, Westport Shipyards was brought into town and their building was to "footprint" over at least nine of the 12 proposed work station pads. The original proposal was becoming down-sized at a rapid rate. This permit will be issued for the wash pad and pretreatment system and will also incorporate advanced Best Management Practices (BMP's) to utilize the wash pad as a work station. The other three remaining proposed pads will not be built at this time.

Marine Terminals 1& 3 have been used for large vessel repair. Mostly this has been voyage repair with replacement of internal structural items from damage at sea. Some topside work has been performed but most has been very minor in nature. Typical topside work would be some minor grinding to weld an item, then hand or roller painted to prevent corrosion. Other work was done per U.S. Coast Guard inspections and direction. Most of this was minor also. Side of vessel hull maintenance work was prohibited due to the absence of any permits. The General Industrial Storm water Permit had been conditioned to allow some limited activities. BMP's have been developed by the Port of Port Angeles to expand the activities at Terminals 1&3

The existing NPDES application is sufficient to develop the State Waste Discharge permit and another application is deemed not necessary.

INDUSTRIAL PROCESSES:

The combination work pad/pressure wash pad will have high pressure and city delivery pressure wash capability. The waste water will contain heavy metals and copper will be dominant. The wash water will also likely contain marine growth such as algae and other attaching organisms. This water might also contain soaps for topside vessel washing.

The pad, while being used as a repair station will have hull sanding and painting. Vacuum sanding will be mandated to reduce pollutant "drop" to the work pad. Painting will be accomplished by brush and roller to minimize the "drift" associated with spray painting. Other processes might include actual fiberglass hull repair, ferrous welding or aluminum heliarc work.

The pier side activity will likely include the use of a robotic sander for some limited hull sanding. All spent blasting agent and removed paint will be vacuumed as it is removed. There should be no loss of any particulate to waters to waters of the state.

TREATMENT PROCESSES:

The treatment of the pressure wash water has been addressed by Advanced Treatment Technologies, Inc. with an engineer's report dated March 5, 2001. This report was adopted by the Port of Port Angeles and their consultant, Hart Crowser. Ecology reviewed this report, made comments and had the appropriate minor changes made. The treatment is chemical precipitation to drop the metals out of the spent pressure wash waste water. Non- process waste water might be generated from the use of the pad as a work station but in the event of storm water during this time it will be collected and treated to meet the same limits as the pressure wash water. All contact water after treatment will be discharged to the Port Angeles POTW. Any storm water on the pad while not in use may be discharge directly to the harbor after the slab has been pressure washed clean. This condition is in the N.P.D.E.S. General Boatyard Permit and will also apply here.

PERMIT STATUS

This is a new permit for this facility. There have been no previous permits. An application for permit renewal was submitted to the Department on July 3, 2001 and accepted by the Department on June 17, 2002

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

This is a new permit and there have been no previous permits for this facility.

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the proposed discharge was reported in the permit application and in discharge monitoring reports. The data presented was generated by two consulting firms, Landau and Associates (LA)(1-23-2001) and Hart Crowser (HC)(5-1-2001). The proposed storm water discharge is characterized for the following parameters:

Parameter	Concentration (ug/l)
Total copper	98.0 (LA) 91.0 (HC)
Total lead	10.0 (LA) 9.0 (HC)
Total zinc	62.0 (LA) 59.0 (HC)

SEPA COMPLIANCE:

SEPA for this facility was completed on April 25, 2002.

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility were determined in the waste water engineering report titled Waste Water Treatment System Evaluation by Advanced Chemical Treatment Technologies dated March 5, 2001.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110).

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect the Port Angeles POTW from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, effluent limitations for certain parameters are necessary. These limitations are based on local limits developed by the City of Port Angeles. Applicable effluent limits for this discharge include the following:

EFFLUENT LIMITATIONS		
Parameter	Maximum Daily	
Arsenic (As)	0.01 mg/L	
Cadmium (Cd)	0.1 mg/L	
Chromium (Cr)	2.0 mg/L	
Copper (Cu)	1.0 mg/L	
Lead (Pb)	0.5 mg/L	
Nickel (Ni)	1.5 mg/L	
Zinc (Zn)	1.5 mg/L	

EFFLUENT LIMITATIONS		
Parameter	Maximum Daily	
Mercury (Hg)	0.05 mg/L	
Silver (Ag)	0.5 mg/L	
Selenium (Se)	0.01 mg/L	

Pollutant concentrations in the proposed discharge with technology-based controls in place will not cause problems at the receiving POTW such as interference, pass-through or hazardous exposure to POTW workers nor will it result in unacceptable pollutant levels in the POTW's sludge.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, significance of pollutants, and cost of monitoring. The monitoring is to be more frequent during the first year of the permit to establish that the pretreatment system for the wash pad will consistently meet the local limits for the POTW. If this is the case, the monitoring can potentially be reduced. If not then the first year's frequency will continue for the Five (5) year duration of the permit.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and 40 CFR 403.12 (e), (g), and (h)).

OPERATIONS AND MAINTENANCE

The proposed permit contains condition S.5. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment. The proposed permit will require the submission of an updated Operations and Maintenance Manual (O&M) for the waste water system.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

The Department has determined that the Permittee has a potential to cause pollution of the waters of the state from leachate of solid waste.

This proposed permit requires, under authority of RCW 90.48.080, that the Permittee develop and submit to the Department a solid waste plan to prevent solid waste from causing pollution of waters of the state. This plan will also be submitted to the Clallam County Environmental Health Division for approval.

This proposed permit requires, under the authority of RCW 90.48.080, that the Permittee update the solid waste plan designed to prevent solid waste from causing pollution of the waters of the state and submit it to the Department. This plan must also be submitted to Clallam County Environmental Health Division.

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The proposed permit requires the Permittee to develop and implement a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs.

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to

maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for five (5) years.

REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations(http://www.ecy.wa.gov/laws-rules/index.html)

Permit and Wastewater Related Information (http://www.ecy.wa.gov/programs/wq/wastewater/index.html

APPENDICES

APPENDIX A – PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on July 14, 2002 and July 21, 2002 in the *Peninsula Daily News* to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on March 25, 2004 in the *Peninsula Daily News* to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Industrial Unit Permit Coordinator Department of Ecology Southwest Region – Water Quality P.O. Box 47775 Olympia, WA 98504-7775

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (360)-407-6291, or by writing to the address listed above.

This permit was written by Greg Cloud.

APPENDIX B - GLOSSARY

Ammonia – Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation – The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

 BOD_5 --Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD_5 is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass – The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards – National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample – A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity – Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring -Uninterrupted, unless otherwise noted in the permit.

Engineering Report – A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample – A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User — A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater — Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference — A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits – Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through — A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Significant Industrial User (SIU)--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blowdown wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge – Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters – Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater – That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit – A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria – A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids – That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit – A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX D – RESPONSE TO COMMENTS

No comments were received.